

Ocean Veritas
Lauren Tom and Krystle Chavarria

1. Sampling begins (06:30), technical difficulties and practice drop, actual drop time (08:00)
2. Tasks: Krystle=DNA, RNA, Protein, Lauren=INT, AODC, Stable Isotope, VOA Analysis, Nutrient Chemistry, Culturing
3. Decided to keep filtering 6L for DNA, RNA, and Protein at the surface and 2L for DNA, RNA, and Protein for multiple depths whenever a plume is detected by the CTD. When no plume is detected, we will only filter the surface. Based on Yvette's extraction and PCR results (from a filtered volume of 800mL from 300m) we decided to reduce the volume filtered in order to cover a broader range of depths in and around a plume.
4. First site: OV027
 - Sampled the surface, no plume was detected, we sampled multiple depths to get a full profile without a plume.
 - OV027-surface: INT, AODC, DNA (), RNA (), Protein (), Stable Isotope, VOA, Nutrient Chemistry. One RNA filter dropped and had to be discarded (600mL), Culturing
 - OV02701: INT, AODC, DNA (0.5L), RNA (0.5L), Protein (0.5L), Stable Isotope, VOA, Nutrient Chemistry
 - OV02702: INT, AODC, DNA (2.4L), RNA (2.4L), Protein (2.5L), Stable Isotope, VOA, Nutrient Chemistry
 - OV02703: INT, AODC, DNA (2.6L), RNA (2.6L), Protein (2.7L), Stable Isotope, VOA, Nutrient Chemistry
 - OV02704: INT, AODC, DNA (2.1L), RNA (2.1L), Protein (2.1L), Stable Isotope, VOA, Nutrient Chemistry
 - OV02705: INT, AODC, DNA (2.5L), RNA (2.5L), Protein (2.5L), Stable Isotope, VOA, Nutrient Chemistry
5. Second site: OV028
 - Sampled the surface only, no plume was detected.
 - OV028-surface: INT, AODC, DNA (6.1L), RNA (6.1L), Protein (6.1L), Stable Isotope, VOA, Nutrient Chemistry, Culturing
6. Third site: OV029
 - Sampled surface, no plume detected, we sampled multiple depths for everything except filtering (if there was some sample left over, we filtered for DNA).
 - OV029-surface: INT, AODC, DNA (5.9L), RNA (5.9L), Protein (5.9L), Stable Isotope, VOA, Nutrient Chemistry
 - OV02902: Cracked niskin, no sample.
 - OV02903: INT, AODC, DNA (500), Stable Isotope, VOA, Nutrient Chemistry, Culturing
7. Fourth site: OV030
 - Sampled the surface, no plume detected, we sampled from plume depth and saved 2L of unfiltered sample for Terry.
 - OV030-surface: INT, AODC, DNA (6L), RNA (6L), Protein (6L), Stable Isotope, VOA, Nutrient Chemistry
 - OV03002: INT, AODC, DNA (450) Stable Isotope, VOA, Nutrient Chemistry, Culturing. Will send Terry 2L of sample from 960m to use as background (plume depth, but no plume)

8. Fifth site: OV031
 - Sampled the surface, no plume detected, we sampled from plume depth and saved 2L of unfiltered sample for Terry.
 - OV031-surface: INT, AODC, DNA (5.8L), RNA (5.8L), Protein (5.8L), Stable Isotope, VOA, Nutrient Chemistry
 - OV03102: INT, AODC, DNA (450) Stable Isotope, VOA, Nutrient Chemistry, Culturing. Will send Terry 2L of sample from 925m to use as background (plume depth, but no plume).
9. Did not detect any plumes today.
10. Finished processing (23:30).